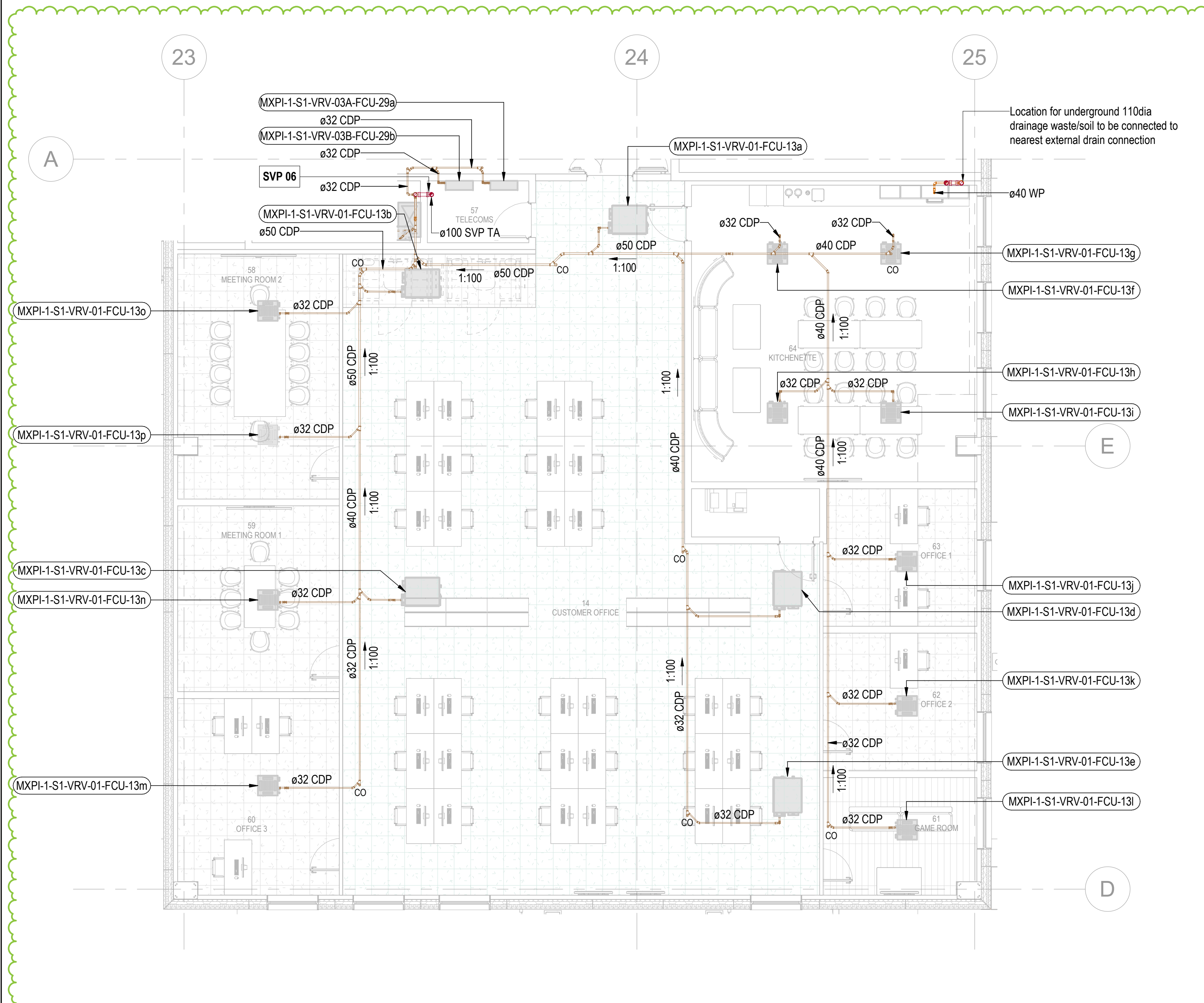
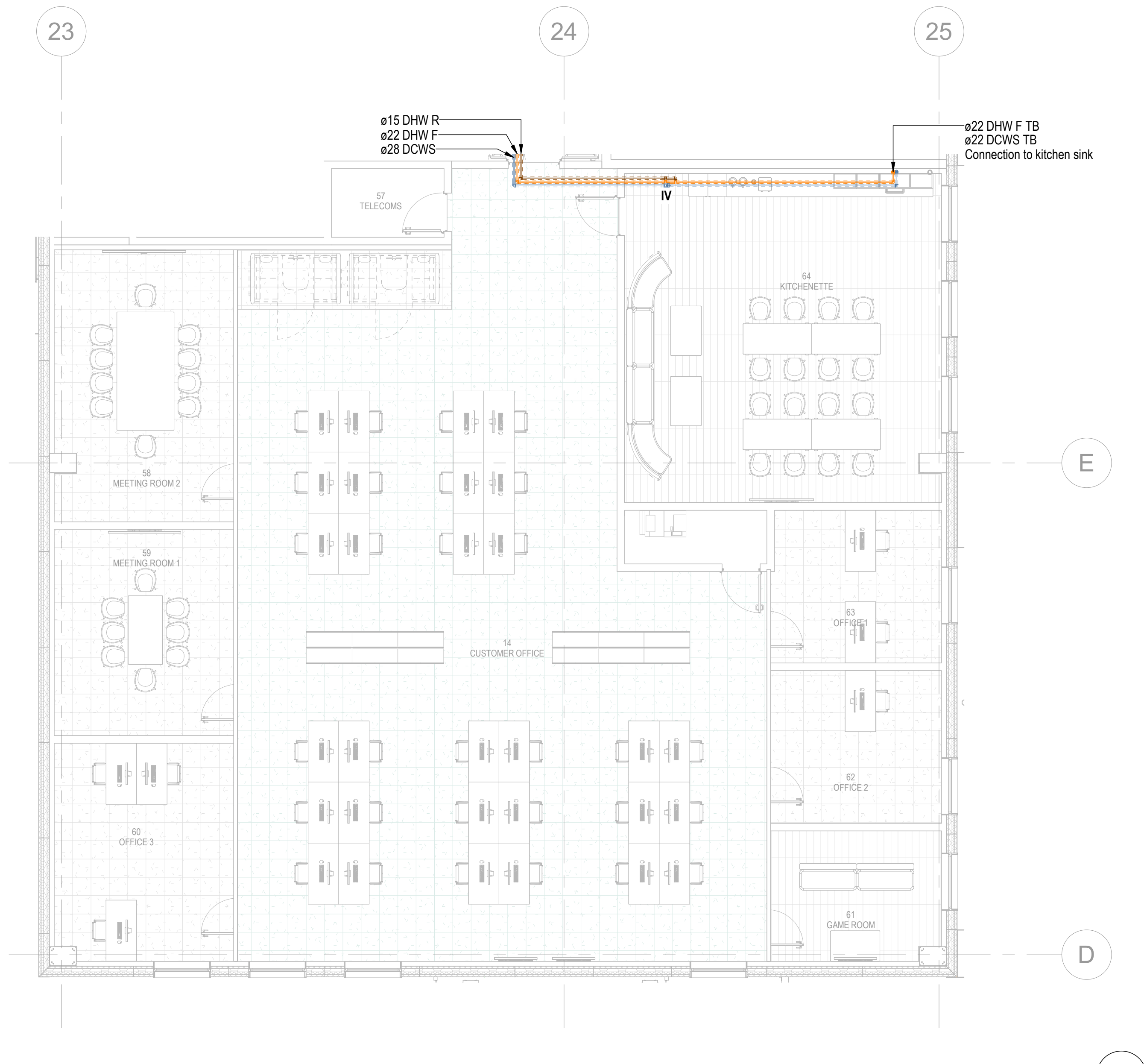
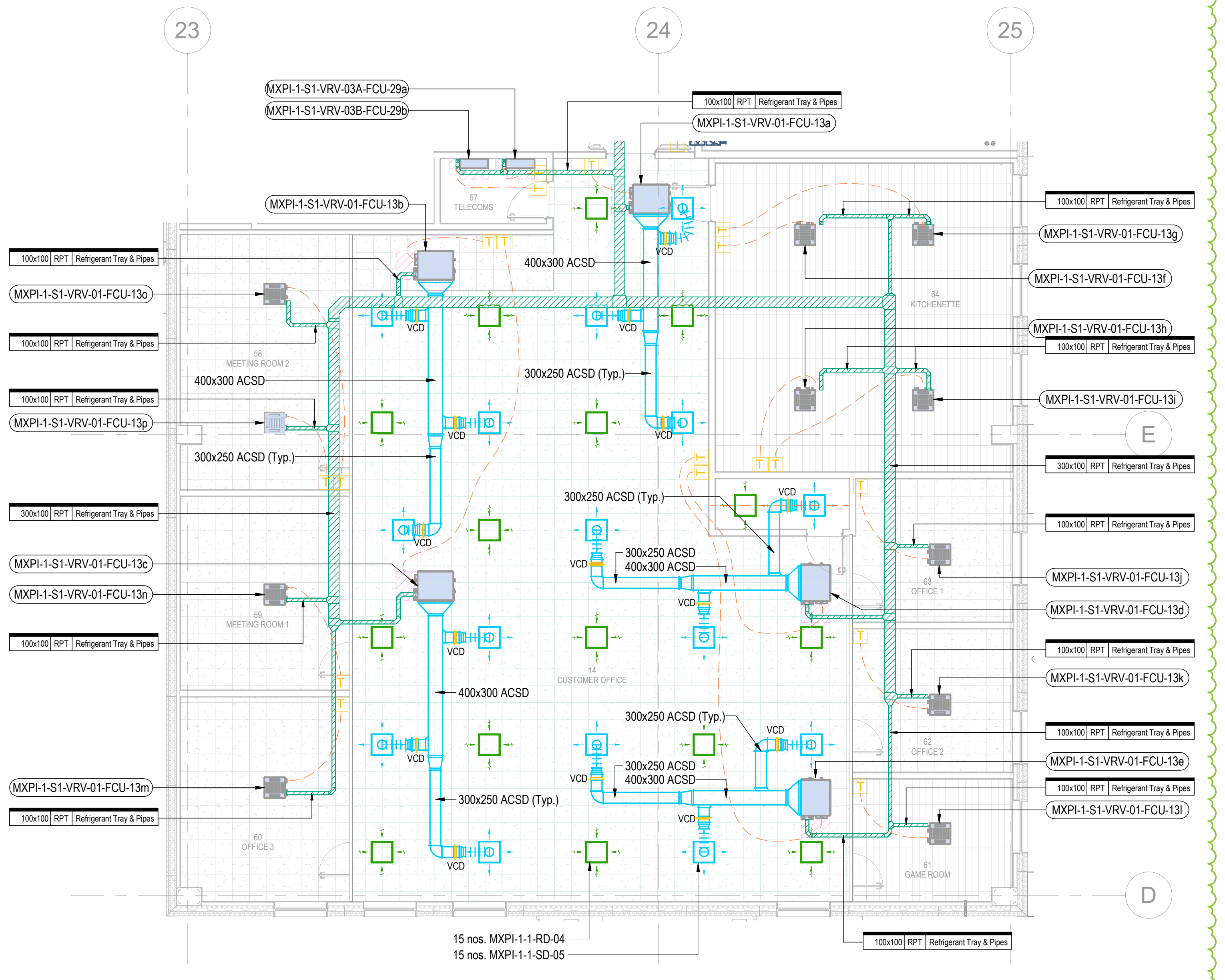
A0 - Do not scale


23
24
25
A
E
D
Location for underground 110dia drainage waste/soil to be connected to nearest external drain connection
SVP 06
ø100 SVP TA
ø40 WP
ø32 CDP
ø50 CDP
ø40 CDP
1:100

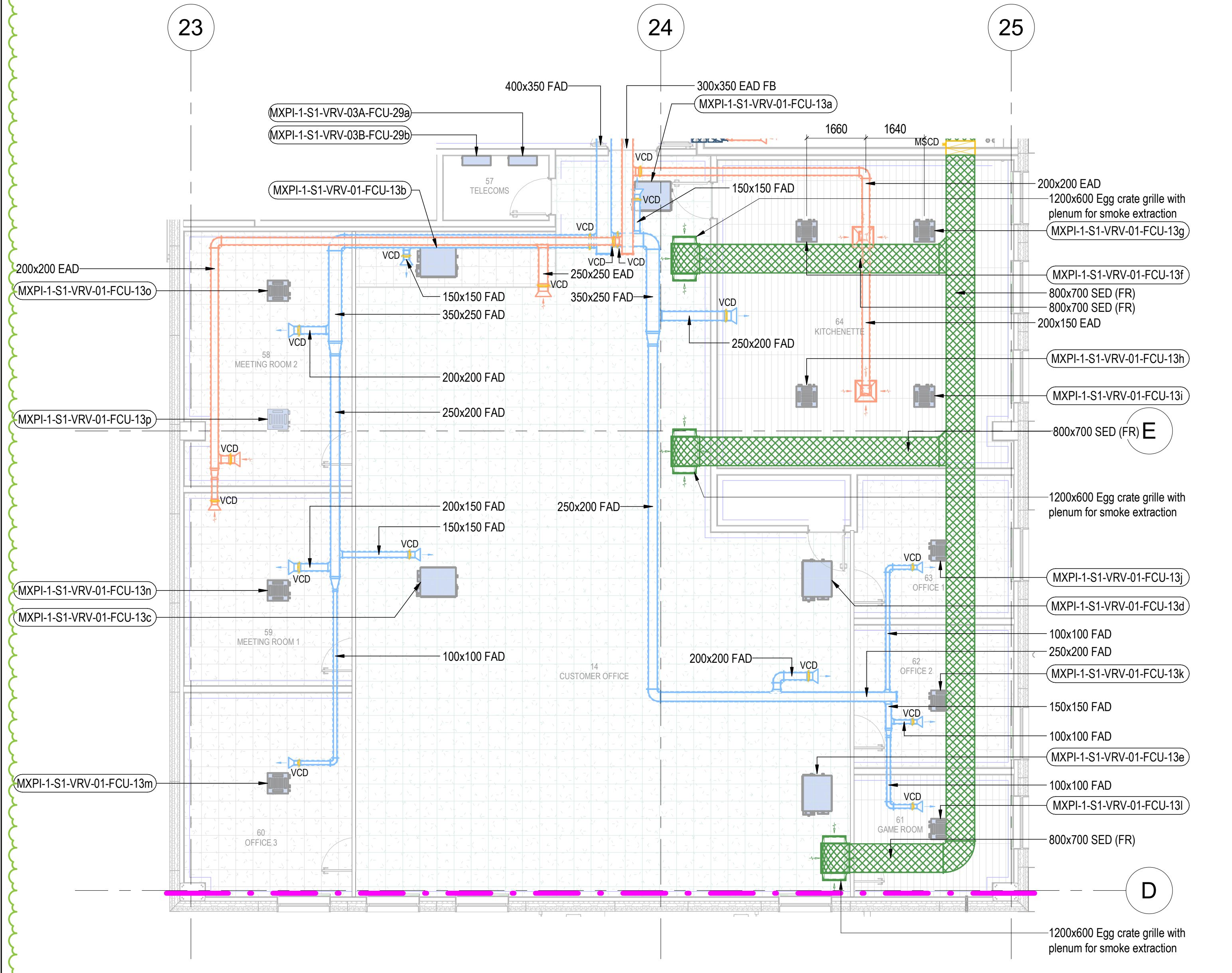
1 Ground Floor - Drainage Layout - Customer Office
1 : 100


23
24
25
E
D
ø15 DHW R
ø22 DHW F
ø28 DCWS
ø22 DHW F TB
ø22 DCWS TB
Connection to kitchen sink

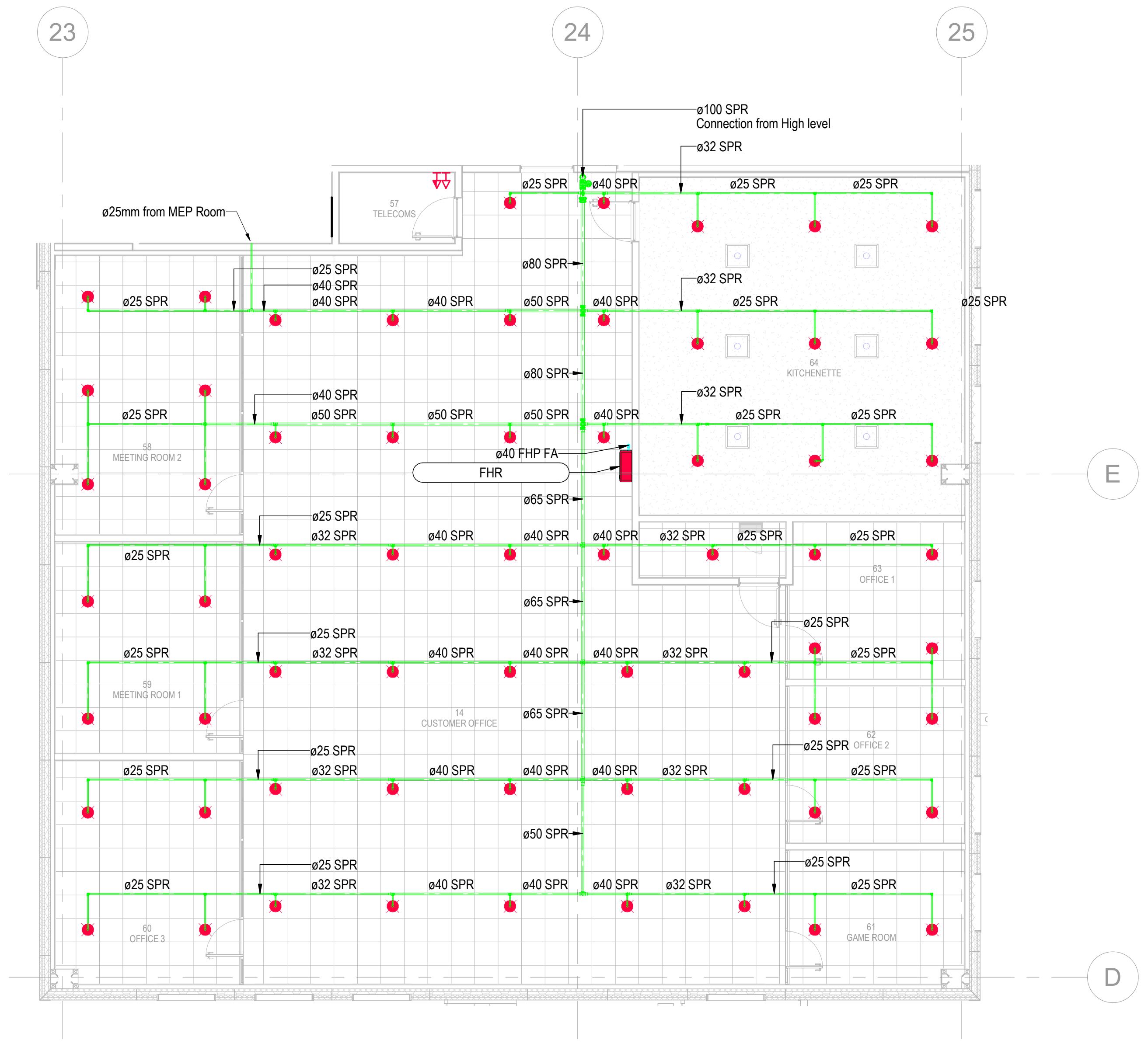
2 Ground Floor - Water Supply Layout - Customer Office
1 : 100


23
24
25
E
D
400x300 ACSD
300x250 ACSD (Typ.)
300x250 ACSD
VCD
100x100 RPT Refrigerant Tray & Pipes
15 nos. MXPI-1-1-RD-04
15 nos. MXPI-1-1-SD-05

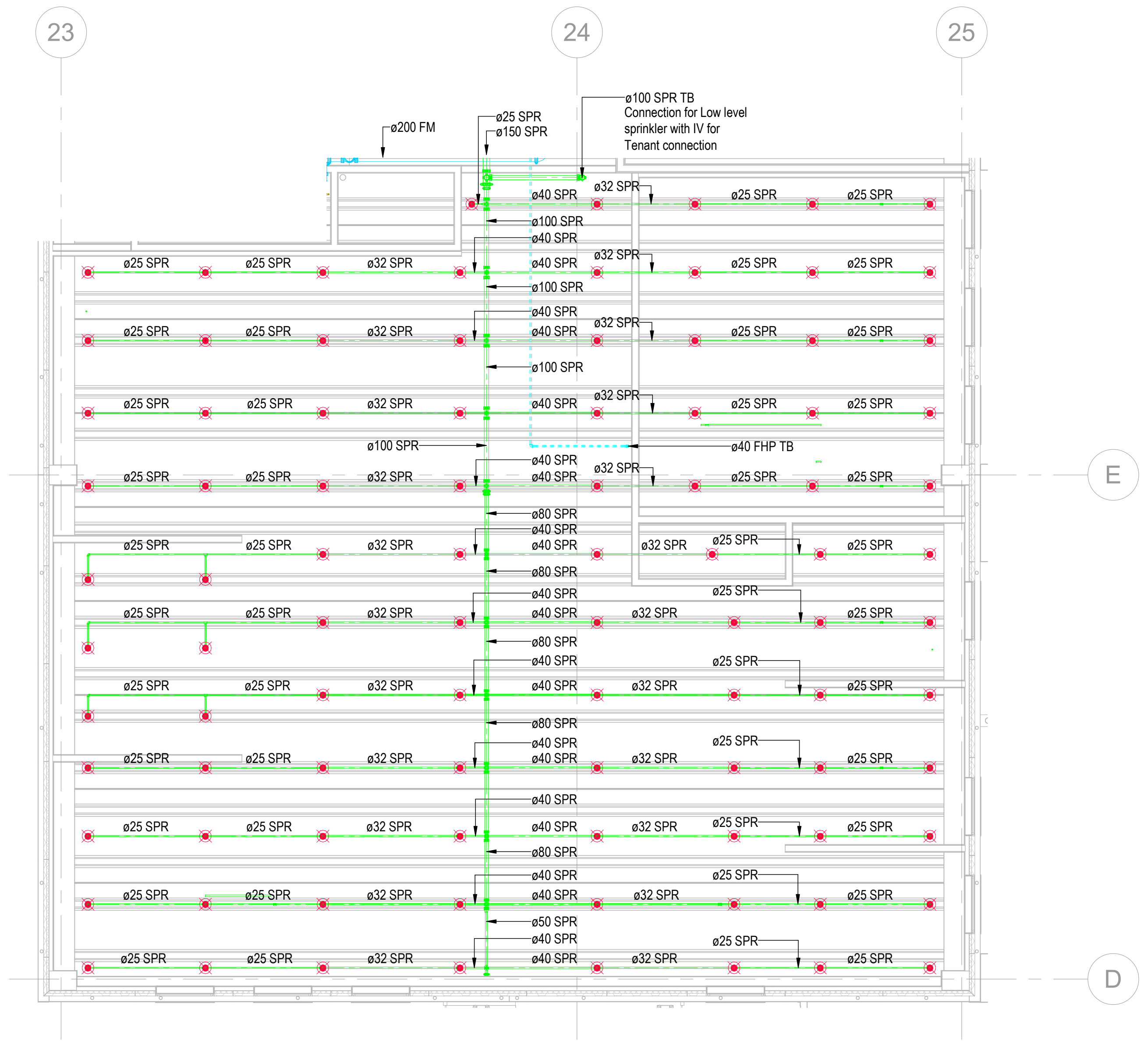
3 Ground Floor - AC & Refrigerant Layout - Customer Office
1 : 100


23
24
25
E
D
400x350 FAD
300x350 EAD FB
200x200 EAD
1200x600 Egg crate grille with plenum for smoke extraction
800x700 SED (FR)
200x150 EAD
150x150 FAD
250x200 FAD
200x200 FAD
100x100 FAD
VCD

4 Ground Floor - Ventilation and Smoke Extract Layout - Customer Office
1 : 100


23
24
25
E
D
ø100 SPR
Connection from High level
ø32 SPR
ø25mm from MEP Room
ø25 SPR
ø40 SPR
ø50 SPR
ø65 SPR
ø80 SPR
ø40 FHP FA
FHR

5 Ground Floor - Fire Protection Layout @ Low Level - Customer Office
1 : 100


23
24
25
E
D
ø100 SPR TB
Connection for Low level sprinkler with IV for Tenant connection
ø200 FM
ø25 SPR
ø150 SPR
ø32 SPR
ø40 SPR
ø80 SPR
ø100 SPR
ø40 FHP TB

6 Ground Floor - Fire Protection Layout @ High Level - Customer Office
1 : 100

Drawing Notes:

1. Refrigerant pipe, tray and VRV system installation shall follow Manufacturer requirement and recommendation
2. Full smoke extract system including but not limited to fans, ducts. Motorized smoke dampers, manually opened egress doors etc are to be installed in phase 1.
3. All external MEP plant and services distribution shall be supported on a non penetrative support system such as Bigfoot (or other equal and approved). All other MEP plant and services distribution throughout the project shall be supported on/by a suitably designed services support structure. The design and installation of this system shall be the responsibility of the contractor and technical proposals should be issued for approval. Final design of the support system located at roof level shall be co-ordinated with roof construction details to ensure full compliance of warranties and waterproofing details. The contractor shall ensure support system installation is in full compliance with seismic requirements applicable to the sites location as stipulated by local code, regional regulations and NTC2018 as per DM 17/01/2018, par.7.2.3.

Drawing Development

This drawing has been developed from the following Design Information:

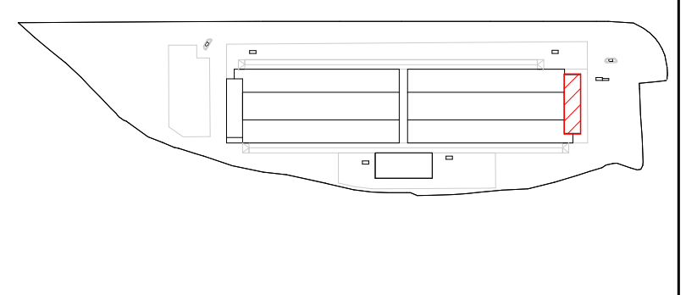
Architectural Model:
MXP-MAE-ZZ-ZZ-M3-A-00001
Received: 28/06/24
Structural Model:
MXP-MAE-ZZ-ZZ-M3-S-00001
Received: 11/09/23
Civil Model:
MXP-MAE-ZZ-ZZ-M3-C-00001
Received: 27/07/23

General Notes

1. This drawing has been checked in accordance with Black & White Engineering (B&W) QA checking procedures.
2. Do not scale from this drawing. All dimensions indicated are in millimeters unless otherwise stated. Validate all measurements on site.
3. All plant and equipment dimensions are typical. The Contractor should show actual, approved plant and equipment sizes.
4. This drawing is to be read in conjunction with all relevant B&W MEP specifications, schedules and standard key to symbols sheet.
5. Any discrepancies between the drawings and other documents should be brought to the attention of the engineer.
6. This drawing is not an installation drawing. It is the Contractors responsibility to make final coordinated installation shop drawings.
7. Final ceiling coordination subject to interior design package.
8. Contractor to coordinate final distribution routes with available sleeves and openings in beams / structure.
9. The contents of this drawing shall be read in conjunction with the current revisions of other relevant Architectural, Structural, Mechanical and Electrical drawings and all relevant sections of the specifications.

1000 0 1000 2000 3000 4000
SCALE: 1:100
N

Key Plan



Legend: Combined Mechanical Services

- VRV Indoor Unit (VIU)
- Ceiling cassette unit
- Refrigerant containment comprising of class 4 galvanised steel tray containment installed at high level within ceiling void
- Access zone
- Supply Air Terminal
- Return Air Terminal
- Extract Air Terminal
- Volume Control Damper (VCD)
- Bellmouth c/w mesh screen
- Motorised Smoke Control Dampers (MSCD)
- Manually Opened Egress Door
- Upright Sprinkler Head
- Pendant Sprinkler Head
- Concealed Sprinkler Head
- Air Vent
- Motorized Fire Damper (MFD)
- Condensate Pipe (CDP)
- Waste Pipe (WP)
- Vent Pipe (VP)
- Smoke Make-up Air Duct (SMAD)
- Smoke Extract Duct (SED)
- Fresh Air Duct (FAD)
- Exhaust Air Duct (EAD)
- Fire main pipe
- Sprinkler pipe
- Drain pipe
- T Thermostat

Mechanical Equipment Asset Nomenclature:

XXX-XX-XX-XX

Sequential Number (Starting from 01)
Equipment Reference:
i.e. ACU, GEN, SEF, VIU
Phase of Installation:
01 - Phase 1
02 - Phase 2
03 - Phase 3
04 - Phase 4
Project Code:
MXP I-I

Abbreviation / Annotations:

AAV = Air Admittance Valve
F/A = From Above
T/A = To Above
F/B = From Below
T/B = To Below
L/L = Low Level
H/L = High Level
SVP = Soil Vent Pipe
RPR = Refrigerant Pipe Riser
RPT = Refrigerant Pipe Tray
DTLL = Down To Low Level
l/s = Liters per second
SEF = Smoke Extract Fan
SED = Smoke Extract Duct
MSCD = Motorized Smoke Control Damper
FR = Fire Rated
SPR = Sprinkler Pipe

Rev	Details	By / Chkd / App	Date
P07	IFC - Design Bulletin No.3	OSV / RS / MB	20/09/2024
P06	Issued For Construction	OSV / RS / MB	21/07/2023
P05	Issued For Compass Review	OSV / RS / MB	23/06/2023
P04	Issued For QA/QC	OSV / RS / MB	16/06/2023
P03	Issued For Construction	OSV / RZS / JD	17/02/2023
P02	Issued For Compass Review	OSV / RS / MB	01/02/2023
P01	Issued For QA/QC	OSV / RS / MB	27/01/2023

Client
COMPASS datacenters

Architectural / Civil / Structural
MAESTRALE
STARCHING
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Redesco Structural Engineering

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PO Box 27793
Tel: +971 4 365 2228
www.bw-engineering.com

Project Title
MXP I-I

Drawing Title
Mechanical Services
Support Building
Customer Office & Storage
Combined Mechanical Services Layout

Project Status
ISSUED FOR CONSTRUCTION

Discipline
Mechanical

Status Code
S5

Project Number
P10424

Scale @ A0
1 : 100

Revision
P07

Drawing Number
MX101

Autodesk Docs://P10424 - MXP/MXP-BWE-ZZ-ZZ-M3-N-00001.rvt 30/09/2024 22:10:50 © Black & White Engineering A0v_Frame_Rev 00